

REMARKS/ARGUMENTS

The applicants thank the Examiner for her discussion of this case in the brief telephonic dialogue concerning this case on February 27, 2006. All pending matters were discussed.

This response acknowledges the previous restriction requirement and hereby cancels withdrawn Claims 14 and 15.

Claims 1-13 were previously under examination and rejected in the outstanding Office Action in view of the U.S. Patent to *Hasebe et al.* (USPN 6,713,849 hereinafter "*Hasebe*").

Claims 1 and 8 have been cancelled and recast as dependent Claims 2 and 9. Dependent Claims 4, 6, 7, 11, & 13 are hereby amended to be consonant with the amendment of the base claims. New Claims 16-19 have been added. Claims 2-7, 9-13 and 16-19 are now pending in this application. Entry of these amendments is respectfully requested. Reconsideration of the Application based on the Amendments and Remarks contained herein is respectfully requested.

Claim Rejections Under 35 U.S.C. § 102

All pending Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by *Hasebe*.

The Applicants address these rejections as follows. Base Claims 1 and 9 are cancelled obviating this ground of rejection as to those Claims.

Claim 2 is amended to incorporate the limitations of both Claim 1 and Claim 2. Accordingly, there is no change in the scope or the subject matter of Claims 2. Claims 4, 6, & 7 have been amended to depend from Claim 2.

Claim 2, as amended, recites "a lead frame panel ... having a ... die attach pad includes a die support surface and a peripheral ledge that is recessed relative to the die support surface wherein the peripheral ledges extend around the outer edges of the die attach pads" (emphasis added). This idea is clearly illustrated in the Figures (See, e.g., Figs. 3, 4C, & 6) of the present Specification. The ledge claimed is at the edge of the die attach pad and is a lower ledge portion that extends to the edge of the pad and entirely around the edge of the pad. This is not the case in the cited art. A

10/789,258
NSC1 P295/ P05886

“peripheral” ledge is an edge-mounted ledge. This is consistent with a dictionary definition of peripheral which is defined as *related to, located in, or constituting an outer boundary or periphery*. Thus, the recited ledge is at the edge of the die attach pad. Additionally, the claimed feature is a ledge, not a groove as taught and shown in the cited art. In particular, *Hasebe* teaches a groove (not a ledge) that does not extend to the edge of the die attach pad. The groove is rather interior from the edge of the die attach pad. This is clearly shown in *Hasebe*, for example at groove 20 of Figs 1, 2, 5, 6, 9, 10, 15, 16, 17, 18, & so on). This feature is described throughout the specification as a “groove 20” (e.g., *Hasebe* Spec. at 8:48-9:9) not as a ledge. Additionally, the groove 20 does not, and cannot, extend to the edge along the entire periphery of the die attach pad. In this fundamental way, the claimed invention is different from the invention taught by *Hasebe*. Absent this fundamental feature of the claimed invention, the cited art fails to teach all elements of the Claims. Accordingly, *Hasebe* does not establish a *prima facie* case for anticipation. Therefore, the applicants respectfully submit that the Claim 2 is not anticipated by the cited art. Thus, applicants request that this ground of rejection be withdrawn as to Claim 2 and the claims depending therefrom (Claims 3-7).

Claim 9 is amended to incorporate the limitations of both Claim 8 and Claim 9. Accordingly, there is no change in the scope or the subject matter of Claims 9. Claims 11 & 13 have been amended to depend from Claim 2.

Claim 9, as amended, recites “a substrate having a die attach pad ... having an upper surface and a peripheral ledge ... wherein the peripheral ledge is ... *surrounding, an outer edge of the upper surface*” (emphasis added). Again, this idea is illustrated in the Figures and Specification. The ledge as claimed surrounds the outer edge of the die attach pad and is a lower ledge portion that extends to the edge of the pad and entirely around the edge of the pad. This is not the case in the cited art. A “peripheral” ledge is an edge-mounted ledge. As explained above, this is consistent with a dictionary definition of peripheral. Thus, the recited ledge is at the edge of the die attach pad. Additionally, the claimed feature is a ledge, not a groove as taught and shown in the cited art. As explained above, *Hasebe* teaches a groove (not a ledge) that does not extend to the edge of the die attach pad but was rather interior from the edge of the die attach pad. This is clearly shown in *Hasebe*, for example at groove 20 of Figs 1, 2, 5, 6, 9, 10, 15, 16, 17, 18, & so on). This feature is described throughout the specification as a “groove 20” (e.g., *Hasebe* Spec. at 8:48-9:9) not as a

10/789,258

NSC1 P295/ P05886

ledge. Additionally, the groove 20 does not, and cannot, extend to the edge along the entire periphery of the die attach pad. In this fundamental way, the claimed invention is different from the invention taught by *Hasebe*.

Accordingly, the cited art fails to teach all elements of the Claims. Accordingly, *Hasebe* does not establish a *prima facie* case for anticipation. Therefore, the applicants respectfully submit that the Claim 9 is not anticipated by the cited art. Thus, applicants request that this ground of rejection be withdrawn as to Claim 9 and the claims depending therefrom (Claims 10-12).

New Claims:

Claim 16-19 have been added to specifically clarify certain patentable subject matter. In particular, Claim 16 is a different articulation of related concepts to those discussed above. In particular, Claim 16 recites that "each die attach pad includes a die support surface and a recessed ledge that is lower than die support surface and extends along an edge of the die attach pad". Accordingly, the applicants respectfully request allowance of Claim 16 and the claims depending therefrom (17-19).

Conclusion:

In view of the foregoing amendments and remarks, it is respectfully submitted that the claimed invention as presently presented is patentable over the art of record and that this case is now in condition for allowance.

Accordingly, the applicants request withdrawal of all pending rejections and request reconsideration of the pending application and prompt passage to issuance. As an aside, the applicants clarify that any lack of response to any of the issues raised by the Examiner is not an admission by the applicant as to the accuracy of the Examiner's assertions with respect to such issues. Accordingly, applicant's specifically reserve the right to respond to such issues at a later time during the prosecution of the present application, should such a need arise.

As always, the Examiner is cordially invited to telephone the applicants representative to discuss any matters pertaining to this case. Should the Examiner wish to contact the undersigned for any reason, the telephone numbers set out below can be used.

10/789,258
NSC1 P295/ P05886

Additionally, if any fees are due in connection with the filing of this Amendment, the Commissioner is authorized to deduct such fees from the undersigned's Deposit Account No. 50-0388 (Order No. NSC1 P295).

Respectfully submitted,

BEYER WEAVER & THOMAS, LLP



Francis T. Kalinski II
Registration No. 44,177

P.O. Box 70250
Oakland, CA 94612-0250
Telephone: (831) 642-9609
Alt. Tel.: (650) 961-8300

10/789,238
NSC1 P295/ P05886

8